Questions and Answers about

Fish and Wildlife Service Biological Opinion on Effects to Listed Species from Operation of the Federal Columbia River Power System

December 21, 2000

1. Why did the Fish and Wildlife Service (Service) develop this biological opinion?

Under the Endangered Species Act, Federal agencies are required to consult with the Service and/or the National Marine Fisheries Service (NMFS) (depending on the species affected) for actions which may affect listed species. The Service, in turn, is required to produce a biological opinion analyzing the effects of the proposed actions on the listed species it is responsible for, and prescribing appropriate alternatives or measures to minimize such effects.

2. What species are addressed in the Service biological opinion?

The current biological opinion addresses operation of the Federal Columbia River Power System (FCRPS) and its effects on bull trout, a threatened species, and Kootenai River white sturgeon, which is listed as endangered. Effects to bald eagles were addressed in the March 1, 1995 biological opinion on FCRPS operations. Since FCRPS operations will not change in such a way as to substantially alter the effects or conclusions of that opinion, bald eagles were not considered further in the current opinion.

3. What dams and activities are addressed in the current biological opinion?

The Service's biological opinion was developed after consultations with the U.S. Army Corps of Engineers and the Bureau of Reclamation, which operate the Federal dams, and the Bonneville Power Administration, which sells the electricity generated at the dams. The dams included in the Service's biological opinion are: Bonneville, The Dalles, John Day and McNary dams (Lower Columbia River facilities); Ice Harbor, Lower Monumental, Little Goose, Lower Granite and Dworshak dams (Lower Snake River and Clearwater facilities); Grand Coulee, Albeni Falls, Libby, Hungry Horse, and Chief Joseph dams and Banks Lake Pump Storage (Upper Columbia River facilities). These projects are located in the states of Oregon, Washington, Idaho, and Montana. The proposed action is the operation and maintenance of these projects which comprise the FCRPS.

4. Does the Service analysis result in a "jeopardy" conclusion for bull trout or sturgeon?
Through the consultation process, the action agencies have agreed to implement additional measures, and clarified their proposed action. These measures address many of the concerns with effects of FCRPS operations to bull trout. Therefore, the Service concluded that operation of the FCRPS would not jeopardize the survival and recovery of bull trout.

The Service is issuing a jeopardy opinion for sturgeon. The most significant concern is the current status

of the species, because sturgeon populations have not significantly improved since a jeopardy opinion was first issued on FCRPS operations in 1995. Reasonable and prudent measures to avoid jeopardy address four main areas: water storage, increased release capacity at Libby Dam, flood stage constraints, and a conservation aquaculture program.

5. Has the Service issued biological opinions prior to the current opinion on operation of the Federal Columbia River Power System (FCRPS), and what species were addressed?

Several biological opinions and conference opinions have been issued by the Service on FCRPS operations. Species addressed through formal consultation in the past include: Kootenai River white sturgeon; Snake River snails, including Idaho spring snail, Snake River physa, Utah valvata snail, Bliss Rapids snail; and bald eagle. In addition, to date, the Service has concurred with the action agencies' determination that FCRPS operations were not likely to adversely affect gray wolf, grizzly bear, peregrine falcon, or any listed plants. Since these initial consultations were completed, peregrine falcon has been de-listed by the Service.

6. What about dams and activities on the Snake River upstream of Lower Granite Dam?

This opinion does not include those federal facilities on the Snake River upstream of Lower Granite Dam, since they were addressed in a separate opinion issued in October, 1999. *(Note: Dworshak Dam, which is on the Clearwater River upstream of Lower Granite Dam, is included in the current Opinion.)* That opinion covered listed snails and bull trout. Those species are, however, considered in the "all-H strategy" for the conservation of aquatic species in the Columbia River Basin.

7. Has the Service developed biological opinions on the effects on listed resident fish and wildlife of other Federal dams in the Columbia River basin that are not part of the FCRPS?

Other Columbia River basin consultations separately are addressing or have addressed operations of Federal dams and related activities in tributaries including the Yakima River Basin, Willamette River Basin, and the Umatilla River Basin, and, as noted above, in the Snake River upstream of Lower Granite reservoir.

8. Does this biological opinion address breaching of Snake River dams?

This opinion does not analyze the effects of the possible breaching of the four lower Snake River dams because that action is not being proposed at this time. If a decision is made in the future to pursue breaching the dams, consultation will be conducted at that time on the effects of that action on listed resident fish and wildlife.

9. Will this opinion affect the operation of the main stem dams in the lower Snake River and the lower Columbia River?

Impacts to bull trout and Kootenai River white sturgeon occur mostly in the upper reaches of the basin,

hence, recommended changes in operations focus on the Upper Columbia River dams. Bull trout are known to occur in the main stem Columbia and lower Snake rivers but their use of these areas is not well known. Therefore, the primary requirements of the opinion for facilities in these areas are to:1) require monitoring to better determine presence of bull trout; 2) ensure that upstream and downstream passage for bull trout is not impeded; 3) determine the effect of flow fluctuations on stranding or entrapment of bull trout; and 4) minimize uncontrolled spill and the effects of total dissolved gas on the species.

10. How will this opinion affect operation of dams in the Upper Columbia River?

The focus of consultations on operations at Libby and Hungry Horse dams and their effects to bull trout has been on: 1) ramping rates; 2) minimum flows; 3) seasonal water management; 4) total dissolved gas concerns; and 5) fish passage and entrainment. The action agencies and the Service have agreed on the need for ramping rates and minimum flows. Operations at Albeni Falls Dam to benefit kokanee salmon, a key food source for bull trout in Lake Pend Oreille, are also addressed in this opinion. With regard to Kootenai River white sturgeon, requirements in the opinion focus on operations of Libby Dam to provide late spring flows to help "trigger" spawning, and to provide for rearing habitat for the fish.

11. Has critical habitat for sturgeon been designated?

A court decision in August, 2000, ordered the Service to propose the designation of critical habitat for Kootenai River white sturgeon. The Service was expected to publish the proposed designation on December 21, 2000, and public hearings on the proposal are scheduled for January 2001. A final rule designating critical habitat will not be made until August 2001. Adverse modification to critical habitat was not a factor considered in the current jeopardy opinion on FCRPS operations.

12. What efforts have you made to meet with affected States and Tribes to discuss the opinion, and incorporate their concerns into the document?

Meetings were held with affected States and Tribes in the winter, spring and summer of 2000 to discuss the FCRPS section 7 consultation process. In those meetings, the action agencies, the Service and NMFS discussed some of the issues being addressed in the consultation, and sought input from the States and Tribes as to issues they wanted considered. The Service's draft opinion was also provided to the States and Tribes for technical review and comment in summer 2000. That input was used in developing this final biological opinion.

13. What efforts have you made to assure the requirements of the Service's opinion do not conflict with those of the NMFS opinion on salmon?

Coordination between the NMFS and the Service has been ongoing during the preparation of the draft and final biological opinions. Both agencies have addressed issues where conflict might arise, and collaborated on solutions to meet both the needs of the listed salmon and steelhead, and the bull trout

and sturgeon. Specifically, the NMFS and Service have agreed to operations (ramping rates and minimum flows) at Hungry Horse and Libby dams that will benefit all species, and implementation of modified flood control operations at both dams to store additional water for resident fish and salmon. In low water years, the agencies have agreed to work out details of operation through the Technical Management Team (TMT) process to balance the needs of listed species.

14. What efforts have you made in the opinion to address concerns of the State of Montana with regard to Hungry Horse Reservoir issues?

The Service has been coordinating with the Montana Department of Fish, Wildlife and Parks (MFWP) to better address listed species and reservoir management issues. Specifically, the Service, NMFS and the action agencies, in coordination with MFWP, have slightly revised the minimum flows and ramping rates provided by MFWP in their comments on the draft opinion. Those revised requirements have been adopted in the opinion.

15. What efforts have you made in the opinion to address concerns of the State of Idaho with regard to Lake Pend Oreille/Albeni Falls Dam issues?

Since their introduction into Lake Pend Oreille 60 to 70 years ago, kokanee salmon have grown into a well established food base for bull trout and other resident species. Kokanee numbers in the lake have declined greatly in recent years, a concern of the Idaho Department of Fish and Game (IDFG). In the biological opinion, the Service recommends continuation of the IDFG kokanee survival study for at least another 6 years. Pend Oreille Lake winter elevations would be lowered in 2001 to 2051 feet, and would be maintained at 2055 feet in 2002. Prior to winter operations in 2003, peer review of the existing study will take place. The review will lead to a recommendation about the frequency of varying the lake winter elevation between maintenance at 2055 feet, and lowering to 2051 feet. Until the peer review is completed, the Service recommendation is for 3 years at the higher elevation, and 1 year at the lower elevation.

16. What efforts have you made in the opinion to address concerns with regard to flooding at Bonners Ferry, Idaho from high flows from Libby Dam?

In the 1995 biological opinion on Libby operations and effects on sturgeon, the Service recommended a survey of the condition of the levees constructed by the Corps of Engineers in 1961. There was concern that the condition of the local levees may represent a constraint to future sturgeon recruitment flow recommendations. The Corps has recently initiated a study to evaluate the condition of the levees, and to determine if higher water tables in the Bonners Ferry area also lead to ground water seepage and localized flooding. The Service will be an active participant in the study with the Corps and local citizens. Until results of these studies are available (likely within five years), the Service will not request sturgeon spawning flows that would result in water elevations at levees in Bonners Ferry exceeding 1764 feet.

17. What will be the impact of the opinion on reservoir re-fill in low water years?

The action agencies propose to implement the flood control procedures, known as VARQ, in the Columbia River basin. They propose to conduct a NEPA analysis prior to adoption of VARQ. The VARQ procedures increase the probability of refill of Lake Koocanusa above Libby Dam, and of Hungry Horse reservoir. The Service has adopted a tiered approach to provide flows for sturgeon in proportion to the water supply actually available in any given year. Further, to assure reservoir refill, the Service does not plan to recommend sturgeon spawning flows during the lowest 20th percentile of water years.

18. What impacts are sturgeon or bull trout water storage recommendations in Lake Koocanusa and Hungry Horse Reservoir expected to have on Lake Roosevelt levels, or on flood control thresholds in the lower Columbia River?

Very little impact is expected. The recommendation to adopt VARQ may result in about a 2 foot average drop in winter levels of Lake Roosevelt. If no adjustment is made at Lake Roosevelt for VARQ at Libby and Hungry Horse Dams, the flows at The Dalles Dam may increase between 2,000 and 4,000 cubic feet per second. The Service supports implementation of measures to off-set impacts to cultural resources and resident fish populations that may occur in Lake Roosevelt as a result of implementation of VARQ.